

ABSTRACT OF THE DISCLOSURE

A method and apparatus for synchronizing an event produced at a digital television receiver with an instant of a transmitted video, audio, or data element of a digital television program is disclosed. In a digital television system, a system time clock generates a timeline that is used to synchronize the presentation of the video, audio, and data elements of the television program. An application time is used in program production to synchronize instants of the several program elements. To synchronize a receiver generated event with an instant of a transmitted video, audio, or data program element, samples of the application time are transmitted to a receiver in a synchronized data service. A reconstructed application time is generated at the receiver as a function of the current system time, the application time sample, and the presentation time stamp of the data access unit in which the application time sample was transmitted. The presentation time of the program instant is associated with an application time correlating the event and the instant. The correlating application time is transmitted to the receiver as part of a synchronous or asynchronous data service and the event is instigated when the reconstructed application time corresponds to the correlating application time. A clock for generating a reconstructed application time synchronized to the system time is also disclosed.